Work Order ID 85946

June-19-12 8:00:55 AM

85946

Item ID: D2803-2 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Bracket

Start Date: 19/06/2012 **Start Qty:** 4.00 *4*

Required Date: 03/07/2012 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLJ **Date:** 12/06/19 **Tooling:** **Date:** **Run Start** *NR1*

QC: **Date:** **SPC (Y/N):** **Date:** **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D2803	Rev B								
100		0.00							
100	FLOW WATER JET					4	0		JM 12-6-20
Waterjet	**Memo**	0.00							
FLOW CNC Waterjet	1-Cut as per File d2803-2_blank Dwg Rev: Prog Rev: 2-Deburr if necessary								
6061 .500" x 10.00"									
110		0.00							
110	HAAS CNC VERTICAL MACHINING #1								DAS 12-09-26 (x3)
HAAS 1	**Memo**	0.00							
HAAS CNC vertical machine #1	Machine as per folio FA102								PTO
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									DAS 12-09-26 (x3)
QC	**Memo**	0.00							
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: [illegible] Date: 12/16/03

QA Closed: CK Date:

Work Order: 859946

Part No. D2803-2

NCR No. 12-1865

DISPOSITION

Rework	
Scrap	X
Use-as-is	
Work Order Update	

AGAINST DEPARTMENT/PROCESS

Skid-tube		Crosstube		Water Jet	X
Machining	W	Small Fab		Prod. Eng. Coor.	
Thermoforming		Finishing		Rec/Store/Packaging	
Large Fab		Composite		Supplier	
Engineering					
Quality					
Other					

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data		12-09-26	110	x1	Holes in blank from waterjet too close to edge machine did not finish machining outside edge around Ø.757 hole. Wall thickness supposed to be .246" actual is .160"	DAS 12 9-89 12/9/26	SCRAP + Destroy Qty x1 No Replace. $192.05	DAS 12 9-89 12/9/26 CT 12-09-26	68-6 DAS 13	DAS 16 12/09/26
Equip/Tooling										
Operator										
Material	X									
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

	Bending
	Centre Not Concentric to O/S
	Cracks
	Crushed/Crimped
	Cuffs
	Heat Treat
	Inspection Strip in Tube
	Ripples in Bend
	Torque Waves in Extrusion
	Turning Sequence
	Wave/Twist in Tube

General

	Bend
	BOM/Route
	Broken/Damaged
	Burrs
	Contamination
	Countersink
	Cut Too Short
	Drill Holes
	Drawing
	Finish
	Folio

	Grain
	Hardware
	Inspection Incomplete
	Instructions Incomplete/Unclear
	Maintenance
	Mislabeled
	Misread
	Offset
	Out of Calibration
	Out of Sequence
	Outside Dimensions

	Ovalized
	Over/Under tolerance
	Part Incorrect
	Part Lost/Missing
	Part Moved
X	Positioned Wrong
	Power Loss/Surge

	Pressure/Forced
	Temperature/Cure
	Weld
	Wrong Stock Pulled
X	Other

Blanks Beat too short

~~Trim~~ Material too Warm

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 85946

June-19-12 8:00:55 AM

85946

Item ID: D2803-2 **Accept** *N9000040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Bracket

Start Date: 19/06/2012 **Start Qty:** 4.00 *4*
Required Date: 03/07/2012 **Req'd Qty:** 4.00 *4*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							
130			BA 12/09/27			3	0		
QC	Memo	0.00							
Quality Control									
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140						3	NR	12-9-28	
HandFinish	Memo	0.00							
Hand Finishing									
145	QC7-Inspect Chemical Conversion Coat	0.00							
145						12/7/28 (3)			
QC	Memo	0.00							
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 85946

June-19-12 8:00:55 AM

85946

Item ID: D2803-2
Revision ID:
Item Name: Bracket
Start Date: 19/06/2012 **Start Qty:** 4.00 *4*
Required Date: 03/07/2012 **Req'd Qty:** 4.00 *4*
Reference:

Accept *N900040100*

Setup Start *NS1*
Stop *NS2*

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Identify as per dwg & Stock Location: ST/48	0.00							
150									
Packaging	**Memo**	0.00				3			12/09/28 JB
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	**Memo**	0.00							
Quality Control									

12/10/10

MF
12-10-01

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Picklist Print

June-19-12 8:00:59 AM

Work Order ID: 85946

85946

Parent Item: D2803-2

D2803-2

Parent Item Name: Bracket

Start Date: 19/06/2012 **Required Date:** 03/07/2012

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP A 00.11.06New IssueEC
IPP Rev:B Blanks now cut on Waterjet 06-06-14 JLM
IPP Rev:C Removed Tumbling 08-09-10 JLM Verified By:EC IPP
Rev:D add qc3 DD 10.02.19 Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.500X10.000		Purchased	No			100	f	55.4000	1.9167	8.070316			JM 12-6-20

M6061T6B0.500X10.000

6061-T6 Bar .500 x 10.00

**

Location	Loc Qty	Loc Code
MAT004	55.4	
121660	31.3	
121836	24.1	121836

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

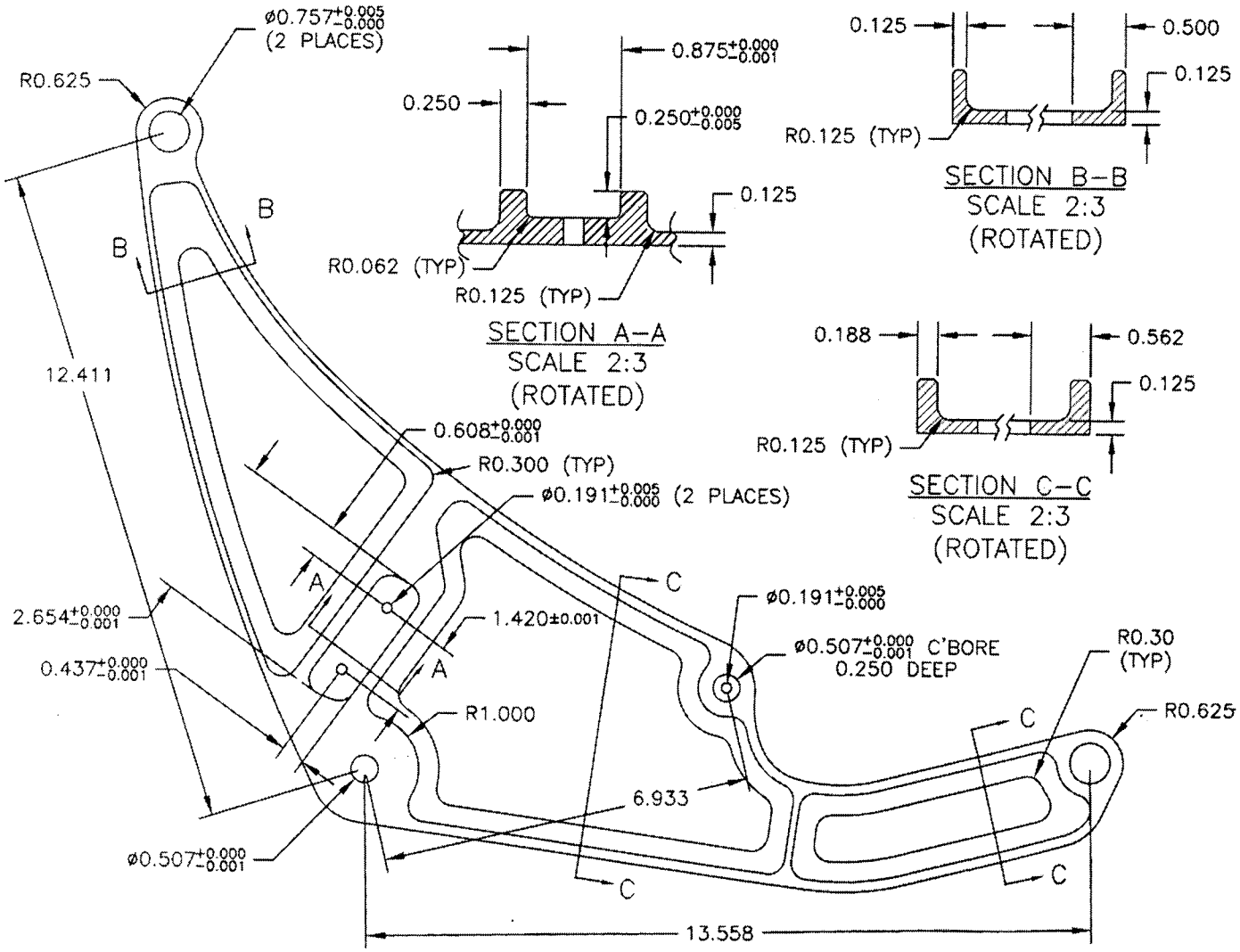
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

DESIGN	DRAWN BY	DART AEROSPACE LTD
CP	CP	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2803 — REV. B — SHEET 1 OF 2
DATE 04.11.22		TITLE STA 84 BRACKET — SCALE 1:3

A	00.11.07	NEW ISSUE
B	04.11.22	ADD CUTOUTS & -043/-044

RELEASED
05.03.11



D2803-1 BRACKET (SHOWN), D2803-2 BRACKET (OPPOSITE)

1) MACHINE PER DRAWING FILE "D2803.SLDPRT"
2) MATERIAL: 6061-T6 (QQ-A-200/8) OR (QQ-A-250/11) 0.500 THICK
3) DEBURR TO LEAVE R0.030 - 0.063 ON ALL EDGES
4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT WITHOUT NOTICE
WORK ORDER NO. 85946 12/06/19

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

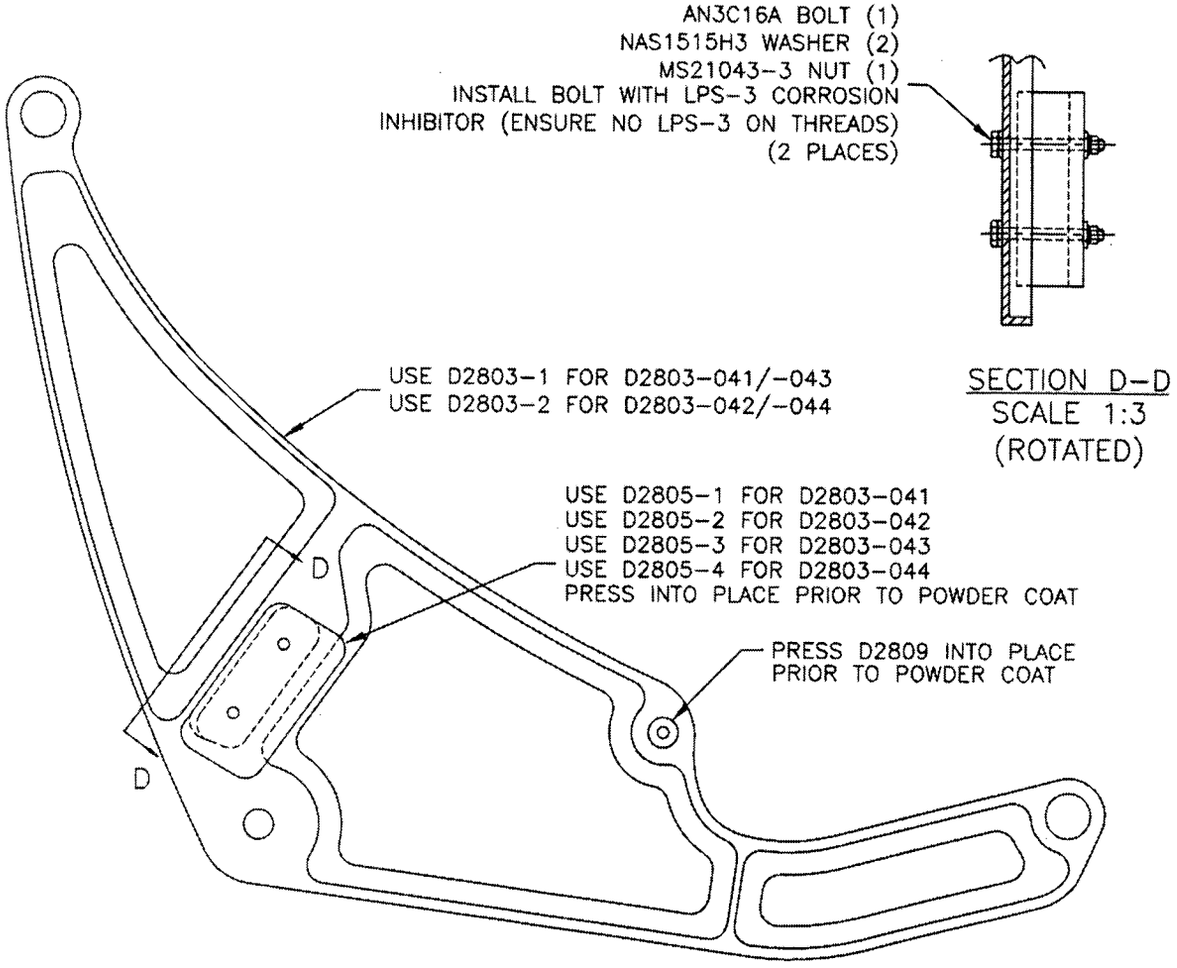
Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CP	CP		
CHECKED	APPROVED	DRAWING NO. D2803	REV. B SHEET 2 OF 2
DATE 04.11.22		TITLE STA 84 BRACKET	SCALE 1:3



RELEASED
05.03.11

D2803-041/-043 BRACKET ASS'Y (SHOWN),
D2803-042/-044 BRACKET ASS'Y (OPPOSITE)

6) FINISH: POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	85946
Description: Bracket	Part Number:	D2803-2
Inspection Dwg: D2803 **Rev:** B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.757	+0.005/-0.000	.759	✓		mic	RT-1
1.420	+/-0.001	1.421	✓		vern	RT-4
Ø0.191	+0.005/-0.000	.192	✓		"	
Ø0.507	+0.000/-0.001	.506	✓		mic	RT-1
Ø0.507 x 0.250	+0.000/-0.001	.506 x .246	✓		vern Depth gage	RT-6
12.411	+/-0.010	12.414			12" vern	
6.933	+/-0.010	6.934			"	
0.250	+/-0.010	.251	✓			RT-4
0.875	+0.000/-0.001	.875	✓			
0.250	+0.000/-0.005	.246	✓		Depth gage	RT-6
0.125	+/-0.010	.133				
0.125	+/-0.010	.125				
0.500	+/-0.010	.500				
0.125	+/-0.010	.133				
0.188	+/-0.010	.190				
0.562	+/-0.010	.564				
0.125	+/-0.010	.133				

Measured by:	RT DA	Audited by:	D.A	Prototype Approval:	N/A
Date:	12-09-26	Date:	12/09/27	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.25	New Issue	KJ/JLM	
B	06.12.07	13.558 dimension removed	KJ/JLM	
C	08.01.16	Tolerance revised for 0.875 dimension	KJ/EC/DD	

.349 .6325

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries